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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/046,446	01/16/2002	Toshio Miyamoto	T&A-110	4041
7590 11/05/2003 MATTINGLY, STANGER & MALUR, P.C. 1800 Diagonal Road, Suite 370 Alexandria, VA 22314			EXAMINER OWENS, DOUGLAS W	
			ART UNIT 2811	PAPER NUMBER
DATE MAILED: 11/05/2003				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/046,446

Applicant(s)

MIYAMOTO ET AL.

Examiner

Douglas W Owens

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 August 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 22-31 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-19 and 21 is/are allowed.
- 6) ☒ Claim(s) 1-4 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of the invention of group I, claims 1 – 24 in Paper No. 5 is acknowledged.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Suggested Claim Amendments

3. In line 2 of claims 5 and 21, it is suggested that "one" be replaced with "a".

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 20 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Claim 20 recites the limitation "...to interpose the plurality of electrodes." in lines 3 and 4. There is insufficient antecedent basis for this limitation in the claim. The scope of the claim cannot be determined, since it cannot be determined which portion of the device in independent claim 14 can be considered to be the plurality of electrodes.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1 – 3 are rejected under 35 U.S.C. 102(b) as being anticipated by US patent No. 6,103,552 to Lin.

Regarding claim 1, Lin teaches a semiconductor integrated circuit device (Fig. 1b, for example), comprising:

- a semiconductor substrate (1);
- a circuit element (Col. 2, lines 8 – 13) constituting an integrated circuit having a plurality of functions;
- an internal connection terminal (6), for selecting one of the plurality of functions;
- an insulating layer (15) covering the internal connection terminal such that the internal connection terminal is selectively exposed; and
- an external connection terminal (12) on the insulating layer,

wherein one of the plurality of functions (on or off) is selected by a connection state (open or short) between the internal connection terminal and the external connection terminal.

Lin inherently teaches an electrode formed on the substrate. This is because Lin teaches that devices are formed in the device layer (2) on the substrate. The integrated circuit would have included devices, such as capacitors and transistors, each of which would have included electrodes.

Lin inherently teaches that the internal connection terminal is connected to the integrated circuit. This is because Lin teaches a plurality of wiring layers (3, 4) between

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the integrated circuit and the internal connection terminal. The purpose of the wiring is to enable communication between the IC and external devices.

Regarding claim 2, Lin teaches a semiconductor integrated circuit device, wherein plurality of functions are a plurality of operation modes (on or off).

Regarding claim 3, Lin teaches a semiconductor integrated circuit device, wherein one of the plurality of functions is selected by supplying a power supply voltage from the external connection to the internal connection terminal (required to operate the IC).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lin.

Lin does not explicitly teach an integrated circuit device, wherein the area of the external connection terminal is larger than the area of the internal connection terminal. Lin is silent in this regard. One having ordinary skill in the art would have been required to select an arrangement wherein the area of the internal connection is larger or smaller than the area of the external connection. Since there is less available space for the internal connection terminal, it would have been obvious for one having ordinary skill in the art to form the internal connection terminal so that it is smaller than the external connection terminal.

Allowable Subject Matter

10. Claims 5 – 21 are allowed.

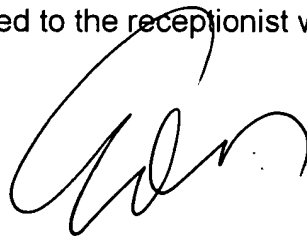
11. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record does not teach, alone or in combination, a semiconductor integrated circuit, including a first wiring on the same surface as an electrode, said wiring connecting the electrode and an element, wherein the wiring and element are covered with an insulating film exposing the electrode and the function or characteristic is selected by the connection state between the electrode and external connection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas W Owens whose telephone number is 703-308-6167. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie C Lee can be reached on 703-308-1690. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.



**EDDIE LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800**

DWO